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Brief Report

The impact of COVID-19 on the social inclusion of older adults with an intellectual disability during the first wave of the pandemic in Ireland

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Abstract

Background Social restrictions and service closures from COVID-19 have negatively impacted social inclusion and well-being for some people with intellectual disabilities (IDs).

Methods The fourth wave of a national longitudinal study on ageing in people with ID in Ireland was interrupted during the COVID-19 outbreak. Social inclusion data for pre-existing participants interviewed before COVID-19 (n = 444) were compared with data for pre-existing participants interviewed during/after lockdown (n = 62). Results More people interviewed after lockdown reported frequent family contact. Significantly greater numbers in the post-lockdown group reported access to and use of technology than the pre-lockdown group. Technology use was higher among those living in grouped residences supported by services compared with individuals living independently or with family.

Conclusions During the early stages of the COVID-19 pandemic in Ireland, many older adults

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with ID stayed connected with family and reported rates of contact higher than were reported by others before COVID-19. This connection may have been supported by a significant increase in technology use during the pandemic. However, uneven use of technology may disadvantage some including individuals living with family or independently. Given that COVID-19 restrictions are likely to continue to restrict social opportunities, increased digital support may assist more people with ID to use technology to maintain their social connections.

Keywords ageing, COVID-19, digital inclusion, intellectual disability, social inclusion, technology

Introduction

Since first being identified in China in December 2019, COVID-19 has had a grievous impact globally, with over 116 million confirmed cases worldwide and 2.6 million deaths from COVID-19 as of 9 March 2021 (World Health Organization 2020). However, in addition to the immediate impact of infection, secondary impacts caused by societal lockdowns aimed at suppressing the virus have begun to be understood. The varied social, economic and cultural

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consequences of the virus, as well as fears of contracting COVID-19, have contributed to effects on mental well-being and social connectedness (Bu et al. 2020; Imran et al. 2020; Rathod et al. 2020), and a critical need for additional research (Hotopf et al. 2020). This paper examines the impact of lock-down measures imposed during the first wave of the COVID-19 pandemic in Ireland on the social inclusion and well-being of adults with intellectual disability (ID).

Social inclusion and intellectual disability

Social inclusion is associated with improved well-being and quality of life for both the general and ID populations (McCrory et al. 2014; van Asselt-Goverts et al. 2015; McCausland et al. 2021b). Social inclusion may comprise social roles and participation in community (Abbott and McConkey 2006; Cobigo et al. 2012; Simplican et al. 2015) and interpersonal relationships (Abbott and McConkey 2006; Hall 2009; Cobigo et al. 2012; Simplican et al. 2015). It may be defined by belonging (Hall 2009; Cobigo et al. 2012; Overmars-Marx et al. 2014) and help to create acceptance and opportunity (Abbott and McConkey 2006). It is a social construct, which is subjective and dynamic and which may vary depending on the personal and environmental circumstances of individuals (Cobigo et al. 2012; Overmars-Marx et al. 2014).

Compared with the general population, people with ID in general are relatively excluded across a range of social measures including relationships and community participation (Mithen et al. 2015; McCausland et al. 2021a), placing them at risk of diminished quality of life and well-being. Therefore, any potential disruption of existing social networks and participation, such as has been occurring in the COVID-19 crisis, has the potential to have a disproportionately negative impact on their wellbeing. Technology may have the potential to bridge this gap. For example, Martin et al. (2021) found that self-determined use of mobile technology and apps was associated with improved social inclusion among adults with ID (mean age 42), as was more frequent use and use of more devices and apps. Chiner et al. (2017) reported daily use of technology by most adults with ID (mean age 25), including chatting with friends and reading or writing on social networks,

while an earlier study found that adults with ID (aged 18–31) used the Internet for social and romantic reasons (Löfgren-Mårtenson 2008). Alfredsson Ågren *et al.* (2020) found that young people with ID (aged 13–25) used social media for social networking and the Internet as a communication tool. However, for older adults with ID, pre-pandemic use of technology was low at a reported 22% (McCausland *et al.* 2017), yet those who did use technology reported significantly better social contacts (Murphy *et al.* 2019).

Impact of COVID-19 on people with intellectual disability

Older adults with ID have many of the high-risk characteristics associated with increased risk of COVID-19 infection, including living in grouped residential settings, mental health difficulties and reduced mobility. They also have known risk factors for adverse outcomes of infection, including increased age, multimorbidity and prevalence of specific high-risk co-morbidities such as obesity, cardiovascular disease, high cholesterol and epilepsy (McCarron et al. 2020). However, recent findings from the first COVID-19 lockdown in Ireland suggest that older adults with ID may have avoided the worst effects of COVID-19 infection (McCarron et al. 2020). Nonetheless, several studies internationally have highlighted an increased risk of severe infection, with adjusted mortality rates for people with ID 6.3 times greater than the general population (Public Health England 2020) and a 10-fold increased risk of death for people with Down syndrome (Clift et al. 2020). Additionally, the age at which COVID-19 impacts people with ID has also been reported as lower than the general population, (LeDeR Programme 2020; Perera et al. 2020; Turk et al. 2020). Average age of death from COVID-19 infection has been reported as 64 years for people with ID (Perera et al. 2020) and 51 years for people with Down syndrome (Hüls et al. 2020).

Lockdown measures associated with COVID-19 mean people with ID have been affected by service closures (Jeste *et al.* 2020; Murphy *et al.* 2020; Schuengel *et al.* 2020) and reduced working hours (Emerson *et al.* 2021), disrupting routines and important social opportunities. Subsequently, studies have reported increased mental health difficulties

(Dhiman *et al.* 2020; Inclusion Ireland 2020; Villani *et al.* 2020) and behaviours of concern (Family Carers Ireland 2020; Schuengel *et al.* 2020) among people with ID and cited increased vulnerability to exploitation or abuse where broader social networks are missing/curtailed (Courtenay and Perera 2020). This study explores how social inclusion has been impacted for a group of participants drawn from the Intellectual Disability Supplement to the Irish Longitudinal Study on Ageing (IDS-TILDA).

Methods

Data were drawn from wave 4 of IDS-TILDA, a nationally representative longitudinal study of ageing among adults with ID aged 40+ years in Ireland. Ethical approval was granted by the Faculty of Health Sciences Research Ethics Committee at Trinity College Dublin in January 2019 and subsequently by all participating service providers. Data collection commenced in September 2019 and was suspended in March 2020 following the outbreak of COVID-19. In May 2020, an amendment to the original ethics application granted use of adapted consent and data collection methods (as well as an additional COVID-19 questionnaire – see McCarron *et al.* 2020 for a detailed overview). Wave 4 data collection was completed in September 2020.

Sample

Data were collected during interviews with participants with ID, (1) on their own, (2) with a support person or (3) with proxy respondents. When wave 4 data collection was interrupted by the COVID-19 outbreak, 559 interviews had been completed in-person with participants prior to the lockdown. A further 180 participant interviews were conducted after lockdown using videoconferencing technology, providing a total wave 4 sample of 739 individuals. Of these, 506 participants also participated in wave 3 of the longitudinal study 3 years previously, and among these, 444 were interviewed for wave 4 prior to the COVID-19 outbreak/suspension and 62 were interviewed when data collection resumed after lockdown. Data for the group of pre-existing participants interviewed before lockdown (n = 444) were compared with data for the group of pre-existing participants interviewed after

lockdown (n = 62). The data compared for these *post hoc* groups were at both the previous wave 3 and at wave 4.

Table I provides an overview of the demographic profile of the sample, showing differences between the two groups analysed in the current study. Adults with ID aged 40 years and above are included in this ageing study, whereas ageing studies of the general population generally use a threshold of 50 years, because people with IDs often present with age-related health conditions at a younger age than the general population (Burke *et al.* 2014).

Measures

Table 2 outlines the social inclusion measures and response options used in the study. All measures were developed for the IDS-TILDA. Family contact was defined as the most frequent contact of any type with any family member. Response options for frequency of contacts with (non-resident) family and friends were then both recoded as 'weekly' (responses I and

Table I Demographic profile of the COVID-19 survey sample

	Pre- lockdown	Post- lockdown	P-value
	n (%)	n (%)	(sig. <0.05)
Gender			-
Male	188 (42.3%)	34 (54.8%)	0.085
Female	256 (57.7%)	28 (45.2%)	0.085
Age			
50–64	273 (61.5%)	53 (85.5%)	0.000
65+	171 (38.5%)	9 (14.5%)	0.000
Aetiology of ID			
Other/unknown	375 (85%)	50 (80.6%)	0.480
Down syndrome	66 (15%)	12 (19.4%)	0.480
Level of ID			
Mild	114 (26%)	17 (27.4%)	0.905
Moderate	204 (46.5%)	25 (40.3%)	0.467
Severe/profound	121 (27.6%)	20 (32.3%)	0.515
Residence type	. ,		
Independent/family	54 (12.3%)	10 (16.1%)	0.516
Community group	202 (45.9%)	34 (54.8%)	0.237
home	, ,	,	
Residential care	184 (41.8%)	18 (29%)	0.074
Total	444 (87.7%)	62 (12.3%)	

ID, intellectual disability.

Table 2 Social inclusion measures

Measure	Question	Response options
Family contact	On average, how often do you (i) meet up with, (ii) speak on the phone with, (iii) write, text, email or Facebook [each family member you do not live with]	Three or more times a week Once or twice a week Once or twice a month
Friends contact	On average, how often do you (i) meet up with, (ii) speak on the phone with, (iii) write, text, email or Facebook [friends you do not live with]	4. Every few months5. Once or twice a year6. Less than once a month7. Never
Social activity	How often if at all, do you do any of the following activities? (1) Go to cinema. (2) Theatre, Concert, Opera. (3) Eat Out. (4) Go to an art Gallery or museum. (5) Go to church or other place of worship. (6) Go to pub for a drink. (7) Go to a coffee shop for light refreshments. (8) Go Shopping. (9) Participates in sports activities/ events. (10) Go to sports events. (11) Go to library. (12) Go to social clubs (i.e. bingo, play cards). (13) Go to Hairdressers. (14) Perform in local art groups and choirs. (15) Spend time on hobbies or creative activities. (16) Visit family and friends in their home. (17) Talk to family and friends on the telephone. (18) Do voluntary work. (19) Other activities.	 Daily/almost daily Once a week or more Twice a month or more About once a month Every few months About once or twice a year Never
Technology access	Do you have access to a computer, laptop, tablet or smartphone on a regular basis?	I. Yes 2. No
Technology use	How often do you use a computer, laptop, tablet or smartphone?	 Most of the time/often Sometimes Rarely Never

2) and '<weekly' (responses 3-7). Social activity was determined as a numerical score (count) of the number of social activities that participants were involved in at least once a week (responses I and 2). Technology access was assessed using a yes/no question. Technology use was asked to participants who responded 'yes' to having access to technology and was recoded as 'technology use' (responses I and 2) and 'no technology use' (responses 3 and 4, plus those who answered 'no' to having access). Several socio-demographic variables available through IDS-TILDA were utilised in the analyses including gender (male, female), age (50-64 and 65+ years), level of ID (mild, moderate and severe-profound), aetiology of ID (Down syndrome and other ID) and type of residence (independent/family, community group home and residential care).

Analyses

Initial bivariate analysis (see Table 1) identified some differences between the two groups (pre-lockdown

and post-lockdown) being examined including a significant difference in age profiles. To better assure that variation found was attributable to the onset of COVID-19 pandemic lockdown, differences between the groups at the wave 3 baseline and again at wave 4 were assessed using cross-tabulations with chi-squared tests for categorical variables and Wilcoxon rank-sum test for continuous variables (P < 0.05). Standard multiple logistic regression with a lagged endogenous variable was then used to assess the impact of COVID-19 on social inclusion, with the exception of the social activity model, which had a continuous dependent variable and used a Gaussian generalised linear model. This approach both controlled for potentially confounding demographic factors and also factored in previous measures of social inclusion at wave 3. As IDS-TILDA is a longitudinal study, it is important to control for participants' responses at the previous wave to determine whether COVID-19 had an impact in the current wave. One approach is to calculate the change in the dependent variable from the previous wave to

the current wave and then modelling this change variable (Allison 1990). However, when the dependent variable is categorical, as with the current study, defining change is not straightforward. The lagged endogenous variable model is presented as an alternative to the change model. It simply adds the dependent variable at the previous wave as a predictor to the model of the current wave. As the conditions under which the change model is preferred are difficult/unlikely to meet, the lagged endogenous model is considered more generally applicable in longitudinal analysis, especially when only a few time periods are involved (Menard 2013).

Results

The analyses explored associations between COVID-19 interview status (pre-lockdown/post-lockdown) and several social inclusion measures, with findings as outlined in the succeeding text.

Contact with family

The bivariate analysis showed no significant difference in family contact between the pre-lockdown and post-lockdown groups whether measured at wave 3 or 4. There was a small difference between the two groups at wave 3, when what became the post-lockdown group had marginally more frequent contact [pre-lockdown group 42.8% and post-lockdown group 48.3% (P > 0.05)]. The difference widened at wave 4 and was just outside of significance (P = 0.057). The regression analysis for family contact then identified a significant difference between the two groups, suggesting that family contact at wave 4 was greater for the post-lockdown group when controlling for other variables in the model [odds ratio (OR) = 2.01, 95% confidence interval 1.03-3.94, P = 0.04] (Table 3). Other significant factors included age, level of ID, residence and family contact at wave 3.

Contact with friends

In the bivariate analysis, there were no significant differences between the pre-lockdown and post-lockdown groups for rates of frequent contact with friends either at the previous wave 3 [pre-lockdown 79.2% and post-lockdown 83.3% (P > 0.05)] or wave 4 [pre-lockdown 74.7% and

Table 3 Regression analysis for family contact (Table S₃)

	Weekly family contact			
	Odds ratio (95% CI)	P-value		
Gender				
Male	1.0			
Female	0.98 (0.62-1.54)	0.92		
Age	, ,			
<65 years	1.0			
65+ years	0.52 (0.31-0.87)	0.013		
Aetiology of intellectual disab	Aetiology of intellectual disability			
Non-Down syndrome	1.0			
Down syndrome	1.11 (0.60-2.06)	0.74		
Level of intellectual disability				
Mild	1.0			
Moderate	1.04 (0.61-1.80)	0.88		
Severe-profound	0.35 (0.17-0.71)	0.004		
Type of residence				
Independent/family	1.0			
Community group home	0.32 (0.15-0.66)	0.003		
Residential care	0.33 (0.15-0.76)	0.007		
COVID-19 interview status				
Pre-lockdown	1.0			
Post-lockdown	2.01 (1.03-3.94)	0.04		
Wave 3 family contact				
<weekly contact<="" td=""><td>1.0</td><td></td></weekly>	1.0			
Weekly contact	6.38 (4.06–10.17)	<0.001		

Overall model fit is significant with P-value <0.000. Nagelkerke r^2 = 0.38. P < 0.05 is significant. All significant factors in bold. No. of observations used: 461. No. of missing values: 45. Cl, confidence interval.

post-lockdown 77.5% (P > 0.05)]. In the regression analysis, as the initial model fit was not significant (P = 0.052), age as the most insignificant independent variable (P = 0.886) was removed from the model. In the resulting model, there was no significant difference between the groups based on COVID-19 interview status, while female respondents were more likely (OR 2.65) and those living in residential care less likely (OR 0.12) to have weekly contact with non-resident friends (Table 4).

Social activities

In the bivariate analysis, there were no significant differences in the mean score for weekly social activities based on COVID-19 interview status, either at the previous wave 3 [pre-lockdown 4.3 (standard deviation, SD 2.5) and post-lockdown 4.2 (SD 2.5),

Table 4 Regression analysis for friends contact (Table S4)

Weekly friends contact Odds ratio (95% CI) P-value Gender Male 2.65 (1.10-6.77) Female 0.03 Aetiology of intellectual disability Non-Down syndrome Down syndrome 1.89 (0.54-9.00) 0.36 Level of intellectual disability Mild 1.32 (0.50-3.47) 0.57 Moderate 0.81(0.21 - 3.32)Severe-profound 0.76 Type of residence Independent/family 1.0 0.29 (0.04-1.22) 0.13 Community group home Residential care 0.12 (0.02-0.54) 0.01 COVID-19 interview status Pre-lockdown 1.0 Post-lockdown 1.88 (0.53-9.06) 0.37 Wave 3 friends contact <Weekly contact Weekly contact 1.13 (0.36-3.17) 0.83

Overall model fit is significant with P-value = 0.032. Nagelkerke r^2 = 0.16. P < 0.05 is significant. All significant factors in bold. No. of observations used: 156. No. of missing values: 350. Cl, confidence interval.

P > 0.05] or wave 4 [pre-lockdown 4.4 (SD 2.6) and post-lockdown 4.6 (SD 2.5), P > 0.05]. The regression model confirmed there was no significant difference between the pre-lockdown and post-lockdown groups for social activity, while age, level of ID, residence type and social activity score at wave 3 were all significant predictors of the dependent variable (Table 5).

Technology access

In the bivariate analyses, significantly higher access to technology was reported by the post-lockdown group at the previous wave 3 baseline [pre-lockdown 32.6% and post-lockdown 47.5% (P < 0.05)], and this gap became larger and more statistically significant at wave 4 [pre-lockdown 48.9% and post-lockdown 82.0% (P < 0.001)]. The regression model for access to technology indicated that access to technology at wave 4 was higher for the post-lockdown group when

Table 5 Regression analysis for social activity (Table S₅)

	Social activity		
_	Estimated coefficient	Standard error	<i>P</i> -value
Gender			
Female	0.307	0.211	0.15
Age			
65+ years	-0.580	0.229	0.01
Aetiology of intellectua	l disability		
Down syndrome	-0.358	0.299	0.23
Level of intellectual dis	ability		
Moderate	-0.214	0.268	0.42
Severe-profound	-1.115	0.333	< 0.00 l
Type of residence			
Community group	-0.745	0.355	0.04
home			
Residential care	-1.381	0.383	< 0.00 l
COVID-19 interview s	tatus		
Post-lockdown	0.160	0.334	0.63
Wave 3 social activity			
Weekly activity	0.306	0.046	< 0.00 l
score			

Overall model fit is significant with *P*-value <0.000. Nagelkerke r^2 = 0.25. P < 0.05 is significant. All significant factors in bold. No. of observations used: 464. No. of missing values: 42.

controlling for other variables in the model (OR = 5.06, 95% confidence interval 2.51-11.04, P < 0.001) (Table 6). Other significant factors in the model included level of ID, residence type and technology access at wave 3.

Technology use

In the bivariate analysis, a significant difference between the pre-lockdown and post-lockdown groups regarding technology use was identified at the wave 3 baseline [pre-lockdown 22.7% and post-lockdown 39.6% (P < 0.05)]. Again, this gap increased with greater significance at wave 4 [pre-lockdown 26.9% and post-lockdown 54.1% (P < 0.001)]. In the regression model for technology use, a significant difference between the groups was confirmed when controlling for other variables in the model. Table 7 shows that participants interviewed after lockdown were more likely to use technology than those interviewed before lockdown (OR 2.86), while other significant variables included age, level of ID,

Table 6 Regression analysis for technology access

Table 7 Regression analysis for technology use

	Technology access			Technology use	
	Odds ratio (95% CI)	P-value		Odds ratio (95% CI)	P-value
Gender			Gender		
Male	1.0		Male	1.0	
Female	0.78 (0.52-1.16)	0.23	Female	1.09 (0.68-1.76)	0.72
Age	,		Age	,	
<65 years	1.0		<65 years	1.0	
65+ years	0.89 (0.58-1.38)	0.61	65+ years	0.45 (0.26-0.78)	< 0.0 l
Aetiology of intellectual disa	bility		Aetiology of intellectual disa	bility	
Non-Down syndrome	1.0		Non-Down syndrome	1.0	
Down syndrome	0.81 (0.45-1.44)	0.47	Down syndrome	0.77 (0.39-1.48)	0.43
Level of intellectual disability	1		Level of intellectual disability	•	
Mild	1.0		Mild	1.0	
Moderate	0.72 (0.43-1.19)	0.20	Moderate	0.77 (0.44-1.37)	0.37
Severe-profound	0.25 (0.14-0.46)	< 0.00 l	Severe-profound	0.31 (0.15-0.65)	< 0.01
Type of residence			Type of residence		
Independent/family	1.0		Independent/family	1.0	
Community group home	3.15 (1.65-6.12)	< 0.00 l	Community group home	2.90 (1.37-6.43)	< 0.01
Residential care	1.86 (0.93-3.77)	0.08	Residential care	2.62 (1.14-6.29)	< 0.05
COVID-19 interview status			COVID-19 interview status		
Pre-lockdown	1.0		Pre-lockdown	1.0	
Post-lockdown	5.06 (2.51-11.04)	< 0.00 l	Post-lockdown	2.86 (1.46-5.65)	< 0.01
Wave 3 technology access			Wave 3 technology use		
No technology access	1.0		No technology use	1.0	
Technology access	2.42 (1.58–3.75)	<0.001	Technology use	4.60 (2.74–7.84)	<0.001

Overall model fit is significant with *P*-value <0.000. Nagelkerke r^2 = 0.23. P < 0.05 is significant. All significant factors in bold. No. of observations used: 484. No. of missing values: 22.

residence type and wave 3 technology use. Notably, people living in both community group homes and residential care were more likely to use technology

than people living in independent/family settings.

Discussion

CL confidence interval

Interpretations of findings presented here should bear in mind the context and timing of the data, particularly for the post-lockdown group, which were collected during and immediately after the first COVID-19 lockdown in Ireland. As such, it is possible that participants' experiences and views regarding the indicators reported here may have subsequently changed as the pandemic became more prolonged and repeated lockdowns were imposed in response to additional waves of infection. However, within the context of the first wave of the COVID-19 pandemic

Overall model fit is significant with P-value <0.000. Nagelkerke r^2 = 0.25. P < 0.05 is significant. All significant factors in bold. No. of observations used: 420. No. of missing values: 86. Cl, confidence interval.

in Ireland, our findings suggest that COVID-19 may have influenced changes in some measures of the social inclusion of older adults with ID in Ireland. We found no evidence of impact on contact with friends, which may have been maintained through increased use of technology to connect. Likewise, there was no evidence of impact on the number of social activities engaged in, which may suggest that this population have relatively fewer opportunities for social activities in general or that they adapted during lockdown to engage in new types of activities, as suggested by McCarron et al. (2020). However, after controlling for demographic differences between the pre-lockdown and post-lockdown groups and for previous findings for the two groups at wave 3, we found significant differences between the groups with regard to family contact, access to technology and use of technology.

What may be surprising is that the post-pandemic group was more likely to have frequent family contact than those interviewed prior to the COVID-19 outbreak. Increased family contacts for this cohort may be influenced by number of factors including increased access and use of technology, the increased availability of family members due to changing work patterns or a heightened concern about their loved ones with ID during this time, while the timing early in the pandemic may also be a factor, and this will be explored longitudinally in the future. The importance of longitudinal data in examining the impact of the COVID-19 pandemic has been highlighted by Bailey et al. (2021) who used a similar design as the current study.

The post-lockdown group also reported more access to and use of technology than the pre-lockdown group. This is potentially a welcome benefit of the COVID-19 period, especially given the previously identified difficulty for older adults with IDs using technology (McCausland *et al.* 2017). Recent studies elsewhere have shown that, given the access, skills and/or support to engage with technology, people with ID often use this opportunity to connect socially with family, friends and others (Chiner *et al.* 2017; Alfredsson Ågren *et al.* 2020; Martin *et al.* 2021).

However, it was also notable that individuals living with family or independently were less likely to use technology than people in grouped residences, who may have had better support from staff to use available technology. Early in the pandemic people with ID highlighted missing their friends (McCarron et al. 2020; Murphy et al. 2020). Previous findings also show that those living independently and with family are more likely to have friends outside their own residence (McCausland et al. 2021a). Therefore, as the pandemic continues into a second year, it is important that this group is also supported to access and use the technology, which may support their social connections until they are able to meet their friends again.

Some limitations of the study should be borne in mind when interpreting the results presented here. While participants were asked about their use of technology, no questions were asked specifically about the use of technologies such as Skype or Zoom to make video calls. No open questions were included, which may have enabled a deeper

understanding of the impact of the pandemic. However, the protocol and measures were designed before pandemic within the context of a wide-ranging longitudinal study on ageing, and therefore, the analyses included in this study were not anticipated. The research team subsequently undertook a specific COVID-19 survey among the same sample, reported by McCarron *et al.* (2020), and will conduct an expanded follow-up study on the impact of COVID-19 among this sample in 2021.

A critical strength of this study is that data come from a long-standing longitudinal study, which pre-existed the COVID-19 pandemic, the type of data highlighted as important to our understanding of the impact of the pandemic on people with ID (Bailey et al. 2021). The interrupted (pre-pandemic/post-pandemic) wave 4 longitudinal data presented here may be further supplemented by pre-pandemic wave 3 data collected in 2017, as well as post-pandemic study of the same sample, including two waves of the specific COVID-19 survey (May–September 2020 and May 2021) and wave 5 of the longitudinal study in 2022–2023.

The implications of the study for further research include making a strong case for the continued and enhanced support for the longitudinal study of health, well-being and social inclusion for people with ID throughout the life course. The analytical approach taken may also be instructive to others with exploring longitudinal data, whether analysis of existing data or data planned for the future. There are also implications for practice, including highlighting the supports needed by people with ID through the remainder of the pandemic, as well as the opportunities for increased connection through technology in the future that have been raised during this period. The study may also demonstrate how services may consider different approaches to supporting individuals including day services and how technology may play a role in reopening of such services. Critical to these opportunities will be ensuring that people with ID and those supporting them possess the digital skills to use technology to their advantage, which is made more difficult because of inaccessible app development (Shpigelman 2018; Martin et al. 2021). This is something that the research team is addressing through the Digi-ID study, which aims to co-create accessible digital skills

education for people with ID and their carers (Murphy *et al.* 2021).

Conclusions

During the early stages of the COVID-19 pandemic in Ireland, many older adults with ID demonstrated an ability to stay connected with family despite their physical separation. The increased use of technology emerging from the pandemic may have supported this continued connection. However, people with ID not living in grouped residences may be missing out on increased connection through technology. As the pandemic continues and many social opportunities remain closed, greater support to connect through technology is needed for this cohort.

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Conflict of Interest

There are no conflicts of interest associated with this study.

Data Availability Statement

Participants of this study did not agree to their data being shared, so supporting data are not currently publicly available.

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Supporting Information

Additional Supporting Information may be found online in the supporting information tab for this article.

Table S3: Regression analysis for family contact **Table S4:** Regression analysis for friends contact **Table S5:** Regression analysis for social activity